Snapper

Sno-Thro®

Parts Manual

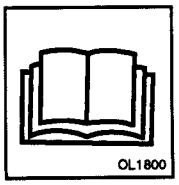
938 SERIES

MODELS

001 - SS322
002 - SS522
003 - SS322E
004 - SS522E
006 - SS322
007 - SS522
008 - SS322E
009 - SS522E
301 - SS322
301*- SS322
302 - SS522
303 - SS522

03801500D Rev. 6/98
Supercedes 03801500,A,B,C
Printed in USA

Ariens®



The Manual

Before you operate your unit, carefully and completely read manuals supplied with the unit. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

For your safety and the safety of others always read, understand, and follow all **⚠DANGER**, **⚠WARNING**, and **⚠CAUTION** messages found in manuals and on safety decals.

Service and Replacement Parts

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

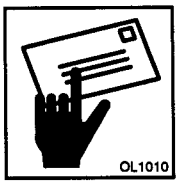
Numbers are located on the product registration card in the unit literature package. They are printed on a serial number label, located on the frame of your unit.

• Record Unit Model and Serial numbers here:

• Record Engine Model and Serial numbers here:

To Speed Parts Ordering Know These

1. Model and serial number of unit.
2. Part number.
3. Quantity required.
4. Description.



Product Registration

A warranty registration card must be filled out by the Ariens dealer, signed, and returned at sale. This card activates the warranty.

The replacement of any part on this unit with anything other than an Ariens authorized replacement part may adversely affect the performance, durability, or safety of this unit and may void the warranty. Claims meeting requirements during limited warranty period will be honored. To guarantee full warranty service, make sure your registration card has been returned to Ariens Company.

Your Satisfaction Is Important

Questions? Please follow these helpful steps:

1. **Always Refer to Your Owner/Operator or Engine Manual First.**
   a) Its detail will guide you through safe and proper operation and maintenance.
   b) It contains specifications on your unit.
   c) If your questions are not answered in these manuals, go to step number two.
2. **Contact Your Ariens Dealer.**
   a) Our dealers will be happy to supply any service or advice required to keep your unit operating at peak efficiency.
   b) A factory trained staff is available to support your equipment needs. They stock genuine Ariens parts and lubricants manufactured with the same precision and skill as the original.
   c) If your questions are not resolved by the support staff, ask for the manager or owner.
   d) When contacting your Ariens Dealer supply your unit or attachment model and serial numbers.

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Model 938001 (SS322)
3 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

Model 938002 (SS522)
5 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

Model 938003 (SS322e)
3 HP 22" Single Stage Electric Start Sno-Thro
Serial No. 000101 and up

Model 938004 (SS522e)
5 HP 22" Single Stage Electric Start Sno-Thro
Serial No. 000101 and up

Model 938006 (SS322)
3 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

Model 938007 (SS522)
5 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

Model 938008 (SS322e)
3 HP 22" Single Stage Electric Start Sno-Thro
Serial No. 000101 and up

Model 938009 (SS522e)
5 HP 22" Single Stage Electric Start Sno-Thro
Serial No. 000101 and up

Model 938301 (SS322)
3 HP 22" Single Stage Sno-Thro
Serial No. 000101 - 000250

Model 938301* (SS322)
3 HP 22" Single Stage Sno-Thro
Serial No. 000250 and up

Model 938302 (SS522)
5 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

Model 938303 (SS522)
5 HP 22" Single Stage Sno-Thro
Serial No. 000101 and up

NOTE: * Distinguishes Different Serial Number Range

Section 1: Decals

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Reference Table

Hardware descriptions are given in decimals.

Decimals to Fractions			
1/16	.062	9/16	.562
1/8	.125	5/8	.625
3/16	.187	11/16	.687
1/4	.250	3/4	.750
5/16	.312	13/16	.812
3/8	.375	7/8	.875
7/16	.437	15/16	.937
1/2	.500	1	1.00

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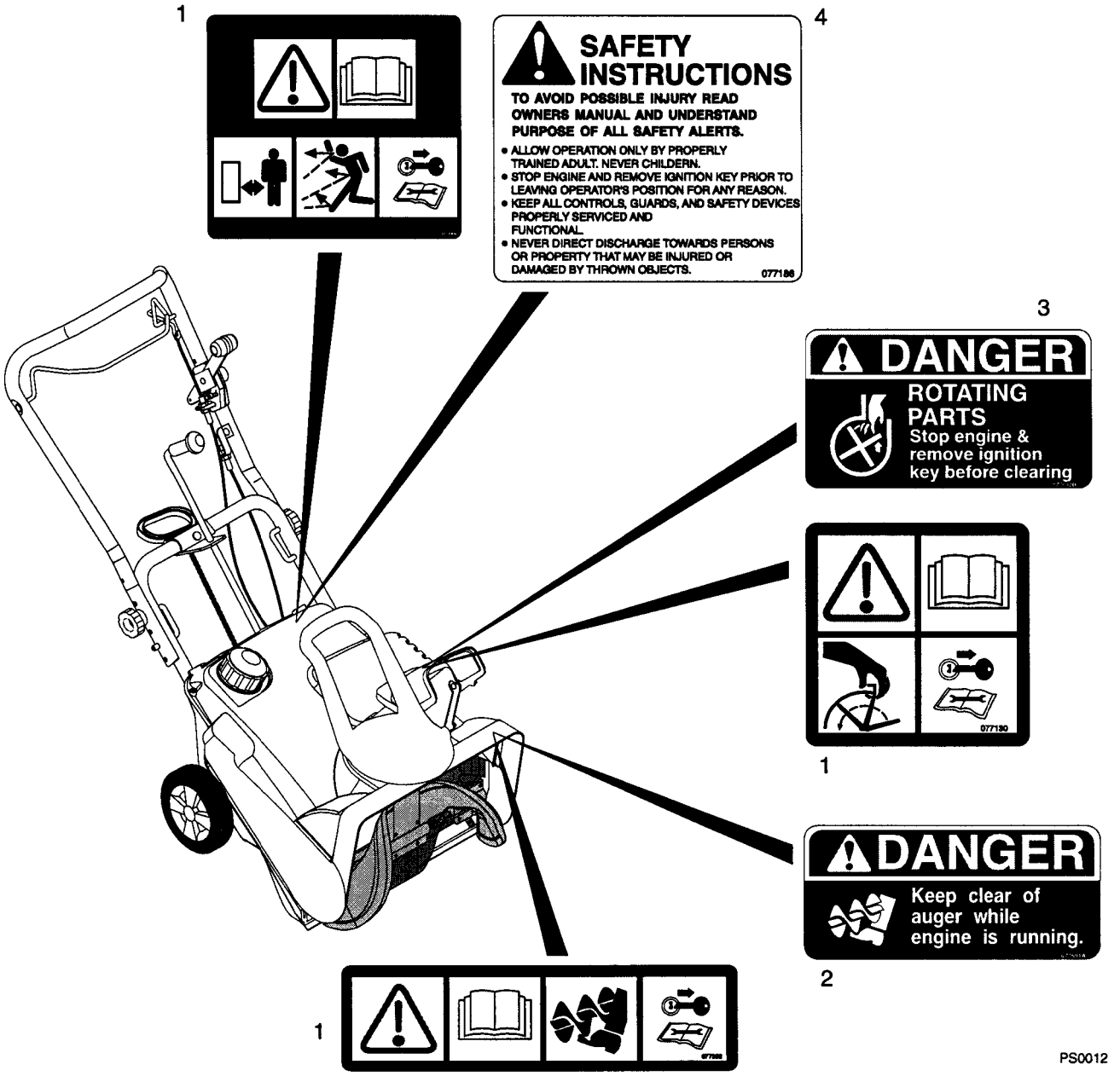
DECALS

Models 938001,002,003,004,006,007,008,009,301,301*,302,303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4
SAFETY INSTRUCTIONS
TO AVOID POSSIBLE INJURY READ OWNERS MANUAL AND UNDERSTAND PURPOSE OF ALL SAFETY ALERTS.
• ALLOW OPERATION ONLY BY PROPERLY TRAINED ADULT. NEVER CHILDERN.
• STOP ENGINE AND REMOVE IGNITION KEY PRIOR TO LEAVING OPERATOR'S POSITION FOR ANY REASON.
• KEEP ALL CONTROLS, GUARDS, AND SAFETY DEVICES PROPERLY SERVICED AND FUNCTIONAL.
• NEVER DIRECT DISCHARGE TOWARDS PERSONS OR PROPERTY THAT MAY BE INJURED OR DAMAGED BY THROWN OBJECTS.
077186
3
DANGER
ROTATING PARTS
Stop engine & remove ignition key before clearing
077190
1
DANGER
Keep clear of auger while engine is running.
2
1
PS0012

Item No.	Part No.	Qty.	Description
1	63800200	1	Decal Set-38,000 Series CE (301,301*,302,303)
2	07769100	1	Decal-Danger (001,002,003,004,006,007,008,009)
3	07769200	1	Decal-Panel Rotating Parts (001,002,003,004,006,007,008,009)
4	07718600	1	Decal-Safety Instruction (001,002,003,004,006,007,008,009)

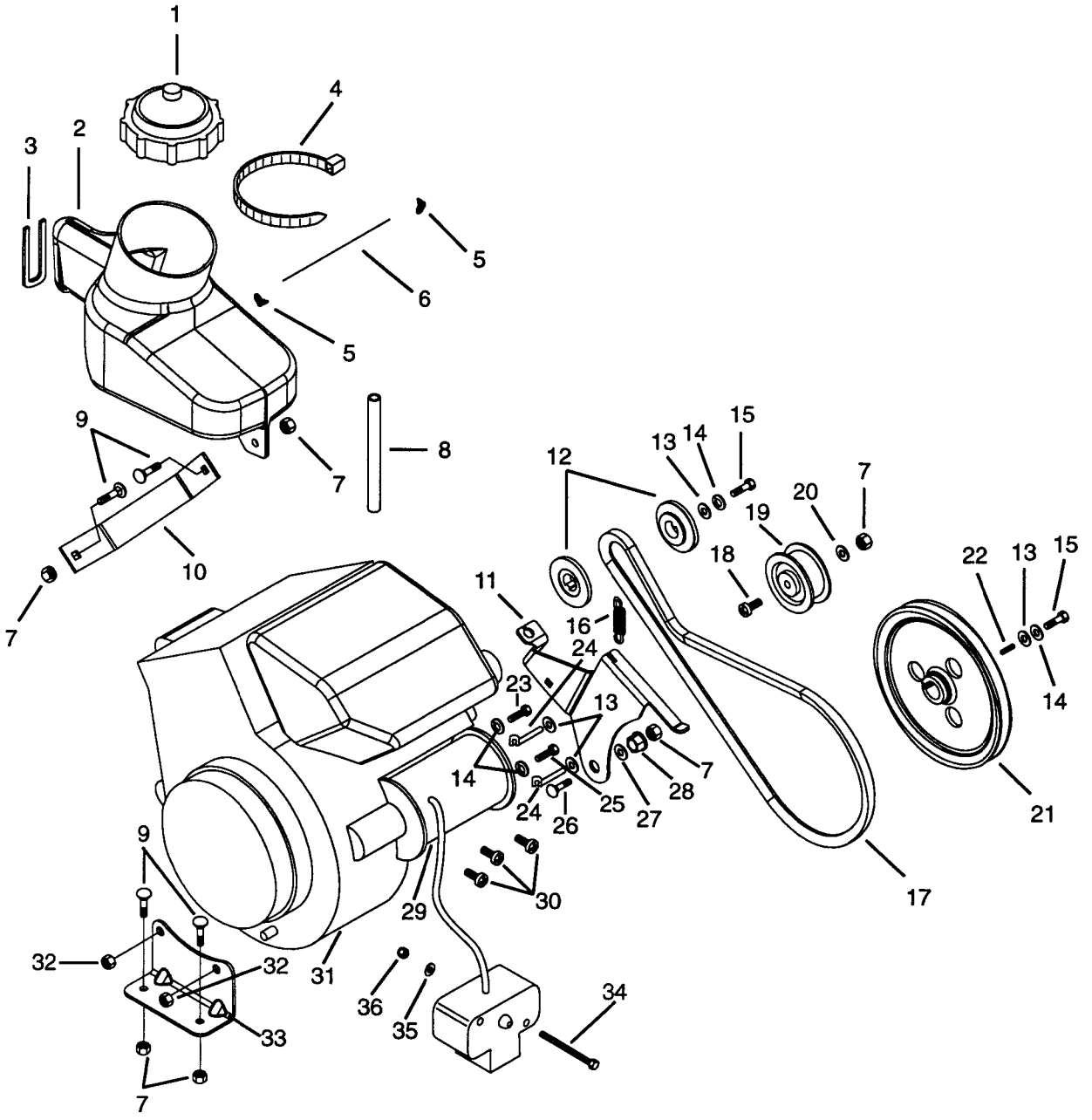
DECALS

Models 938001,002,003,004,006,007,008,009,301,301*,302,303

PS0022

Item No.	Part No.	Qty.	Description
1	07718200	1	Decal-Panel
2	07728800	1	Decal-Ariens (006,007,008,009,301*,303)
3	07718400	1	Decal-SS522 (002,302)
	07718300	1	Decal-SS322 (001,301)
	07718800	1	Decal-SS322e (003)
	07718700	1	Decal-SS522e (004)
4	07843500	1	Decal-Auger/Impeller Bail
5	63801900	1	Decal Set-5HP Electric (007,009,303) Contains Items 5 and 6, Item 6 used only on (009)
	63801800	1	Decal Set-3HP Electric (006,008,301*) Contains Items 5 and 6, Item 6 used only on (008)
	07718500	1	Decal-Ariens (001,002,003,004,301,302)

Models 938001,002,003,004,006,007,008,009,301,301*,302,303



PS0031

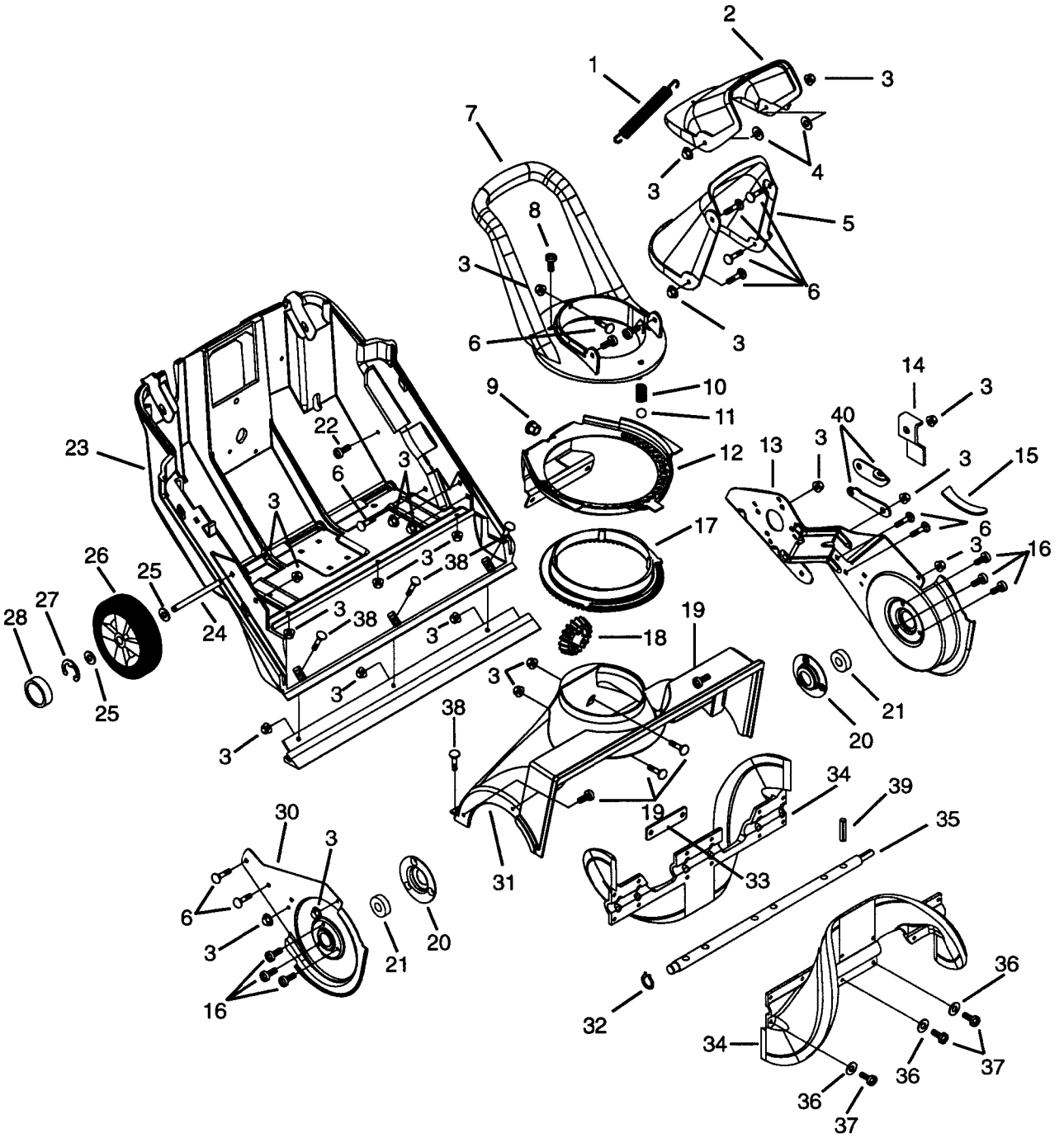
ENGINE AND DRIVE

Models 938001,002,003,004,006,007,008,009,301,301*,302,303

Item No.	Part No.	Qty.	Description
1	07525300	1	Cap-Fuel
2	03800400	1	Tank-Fuel
3	03807800	1	Tape Foam-Neoprene 6.0"
4	04003500	1	Tie Wrap-15.25" x 120 lbs (002,004,302)
5	02917200	2	Hose Clamp
6	03328000	1	Gas Line Hose (001,003,006,008,301,301*)
	03807900	1	Gas Line 1/4" I.D. x 9.5 (002,004,007,009,302,303)
7	06527600	6	Nut-Locking-Center-Flange .250-20
8	03803300	1	Line-Primer
9	06204200	4	Bolt-Round Head Square Neck .25-20 x .75
10	03802600	1	Bracket-Fuel Tank Mounting
11	03807500	1	Arm-Idler
12	03801100	2	Pulley-Drive 3L x 1.52 Diameter (001,003,006,008,301,301*)
	03801200	2	Pulley-Drive 3L x 1.80 Diameter (002,004,007,009,302,303)
13	06409000	4	Washer-Flat-Steel .328 x .875 x .062
14	06303600	6	Washer-Lock .313 x .078
15	05905300	2	Bolt-Hex .31-24 x .75
16	08331600	1	Spring-Tension .043 x .44 x 3.31
17	07228500	1	V-Belt 3L-Section 33.00 x .38 (001,003,301)
	07228600	1	V-Belt 3L-Section 33.45 x .38 (002,004,302)
	07232100	1	V-Belt 3L-Section 33.00 x .38 (006,008,301*)
	07232200	1	V-Belt 3L-Section 33.49 x .38 (007,009,303)
18	06200100	1	Bolt-Round Head Square Neck .25-20 x 1.25
19	07321900	1	Idler-Flat 1.75 x .27
20	06426600	1	Washer-Flat-Steel .281 x 1.000 x .063
21	03801000	1	Pulley-Impeller Shaft 3L x 6.0 Diameter
22	06606100	1	Key-Square .188 x .75 x .188
23	05902200	2	Bolt-Hex .31-18 x .75 (001,003,006,008,301,301*)
		3	Bolt-Hex .31-18 x .75 (002,004,007,009,302,303)
24	03805500	2	Finger-Belt (001,003,006,009,301,301*)
		1	Finger-Belt (002,004,007,009,302,303)
25	05900300	2	Bolt-Hex .31-18 x 1.00 (001,003,006,008,301,301*)
		1	Bolt-Hex .31-18 x 1.00 (002,004,007,009,302,303)
26	06114400	1	Screw-Machine .25-20 x .75
27	06403800	2	Washer-Flat-Steel .505 x .875 x .024
28	05513400	1	Bushing-Flange .265 x .437 x .250 x .750
29	03803400	1	Motor-Starting Tec #1133-106 (003,008)
	03803500	1	Motor-Starting Tec #1A173-111 (004,009)
30	07029600	2	Screw-Hex Flange Washer Head-TX .25-20 x .868 (003,008)
	07029500	3	Screw-Hex Flange Washer-Head-TX-Sems .25-20 x .49 (004,009)
31	08243800	1	Engine-Tec 3 HP 2 Cycle (001,003,006,008,301,301*)
	08243900	1	Engine-Tec 5 HP 2 Cycle (002,004,007,009,302,303)
32	06504200	2	Nut-Locking .312-18
33	03801600	1	Bracket-Engine Mounting
34	06114600	2	Screw-Machine 8-32 x 2.75 (003,004,008,009)
35	06406800	2	Washer-Flat-Steel .194 x .492 x .047 (003,004,008,009)
36	06531300	2	Nut-Locking 8-32 (003,004,008,009)

AUGER/IMPELLER

Models 938001,002,003,004,006,007,008,009,301,301*,302,303



PS0061

AUGER/IMPELLER

Models 938001,002,003,004,006,007,008,009,301,301*,302,303

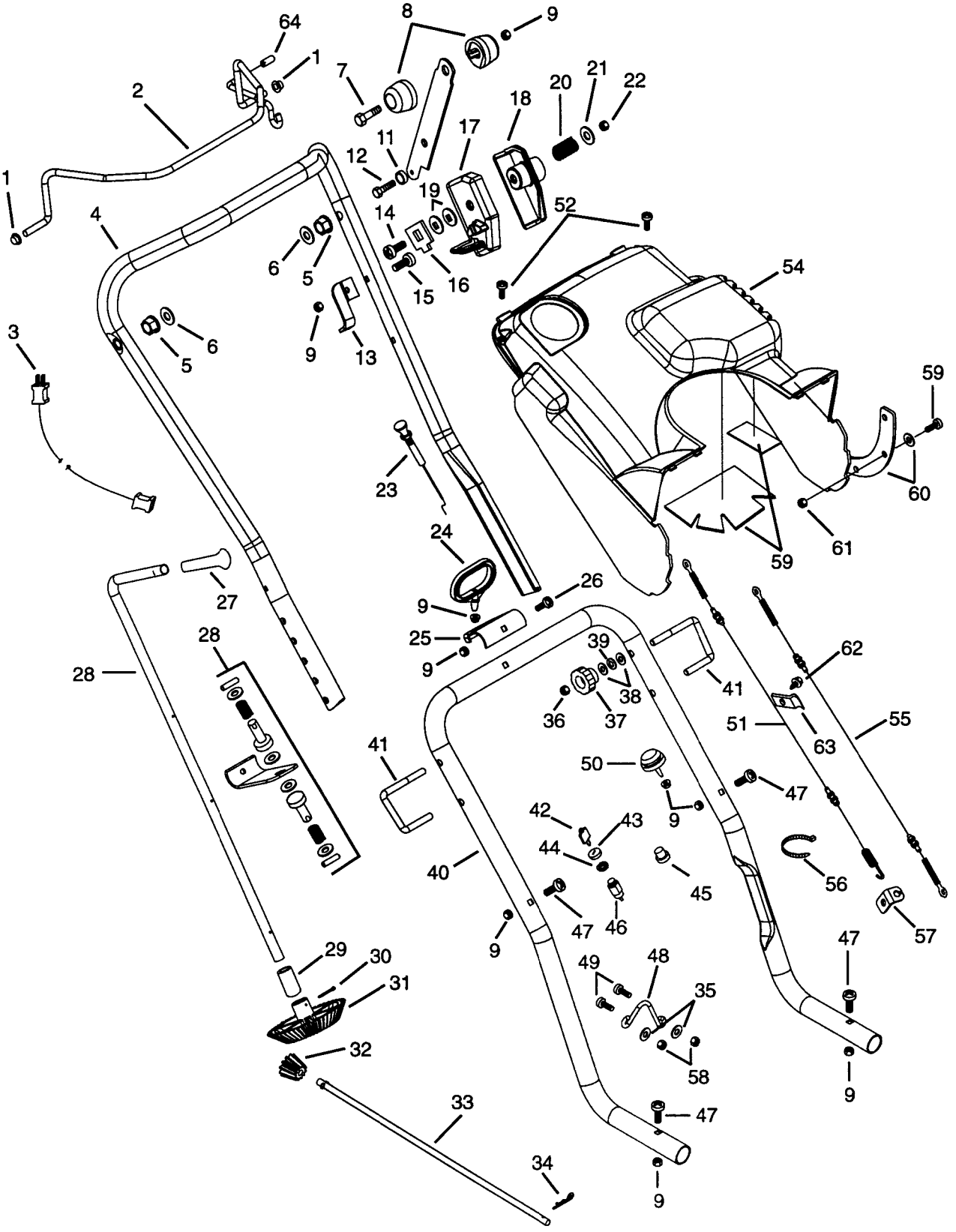
Item No.	Part No.	Qty.	Description
1	08329900	1	Spring-Tension (002,004,302)
2	53800400	1	Deflector-Discharge Chute Assembly
3	06527600	23	Nut-Locking-Center-Flange .250-20 (001,003,301)
4	06437800	2	Washer-Flat-Rubber .31 x 1.25 x .06
5	03801900	1	Chute-Discharge
6	06204200	8	Bolt-Round Head Square Neck .25-20 x .75
7	03805600	1	Handle (002,004,302)
	03801800	1	Handle (001,003,006,007,008,009,301,301*,303)
8	07409500	4	Screw-Tapping 8-18 x 1.50
9	05514500	1	Bushing-Flange .325 x .444 x .440 x .560 (002,004,007,009,302)
10	08329800	1	Spring-Compression .045 x .360 x 2.75 (001,003,006,008,301,301*,303)
11	05429800	1	Ball .375 (001,003,006,008,301,301*,303)
12	03801700	1	Bracket-Discharge Chute Rotation
13	53800800	1	Support-Bearing (001,002,003,004,301,302)
	03807100	1	Support-Bearing-Left Hand (006,007,008,009,301*,303)
14	03803200	1	Deflector-Exhaust (001,003,006,008,301,301*)
15	03808000	1	Tape-Adhesive Backed Foam 11.0
16	07401500	6	Screw-Tapping .250-20 x .37
17	03804000	1	Gear-Discharge Chute Segment
18	03804100	1	Pinion-Discharge Chute 18T (002,004,007,009,302)
19	06114300	5	Screw-Machine .25-20 x .50
20	03800800	2	Cup-Bearing
21	05418800	2	Bearing Ball .699 x 1.575 x .47
22	06203700	1	Bolt-Round Head Square Neck .25-20 x 1.00
23	03800300	1	Chassis
24	03802300	1	Axle
25	06404300	4	Washer-Flat-Steel .406 x .812 x .065
26	07139400	2	Tire/Wheel Assembly 7.0 x 1.5
27	05717400	2	Ring-Retaining-External .375 x .035
28	03802400	2	Cap-Hub
29	03802500	1	Scraper
30	53800800	1	Support-Bearing (001,002,003,004,301,302)
	03807200	1	Support-Bearing-Right Hand (006,007,008,009,301*,303)
31	53800300	1	Housing-Impeller Assembly
32	05706100	1	Ring-Retaining-External .672 x .035
33	03803000	6	Plate-Bolt-Self-Tapping
34	03807000	2	Impeller Half
35	53800700	1	(A) Kit-Impeller Replacement (001,002,003,004,301,302)
	03806900	1	(B) Shaft-Impeller-See Note (006,007,008,009,301*,303)
36	06426600	12	Washer-Flat-Steel .281 x 1.000 x .063
37	07412400	12	Screw-Tapping .250-20 x 1.00
38	06114400	10	Screw-Machine .25-20 x .75
39	05809200	6	(B) Pin-Roll .250 x 1.75 - See Note (006,007,008,009,301*,303)
40	03806200	1	Arm-Spring (001,002,003,004,301,302)
	03807400	1	Bracket-Spring (006,007,008,009,301*,303)

"A" or "B' in front of the description in the description column has the following meaning: A=Before serial numbers as follows and B=After serial numbers as follows:

938001 = 002777
938002 = 001956
938003 = 000899
938004 = 000801
938301 = 000250
938302 = 000250

HANDLEBARS, CONTROLS, AND SHROUDS

Models 938001,002,003,004,006,007,008,009,301,301*,302,303



PS0052

HANDLEBARS, CONTROLS, AND SHROUDS

Models 938001,002,003,004,006,007,008,009,301,301*,302,303

Item No.	Part No.	Qty.	Description
1	07008200	2	Nut-Push .312 (001,002,003,004,301,302)
2	03806351	1	Engine Bail (001,002,003,004,301,302)
	03807351	1	Bail-LClutch Control (006,007,008,009,301*,303)
3	07524800	1	Extension Cord Tec #1A174-17 (003,004,008,009)
4	03804400	1	Handle Bar-Upper
5	05514500	2	Bushing-Flange .325 x .444 x .440 x .560
6	06412300	2	Washer-Flat-Steel .344 x .688 x .065
7	05934100	1	Bolt-Hex .25-20 x 1.38 (002,004,302)
8	07525600	2	Knob (002,004,302)
9	06527600	6	Nut-Locking-Center-Flange .250-20
10	03804900	1	Lever-Chute Defl Control (002,004,302)
11	03232200	1	Spacer .230 x .310 x .255 (002,004,302)
12	07404500	1	Screw-Tapping 12-24 x .50 (002,004,302)
13	03804800	1	Anchor-Cable-Chute Defl Control (002,004,302)
14	06218000	1	Bolt-Round Head Square Neck .38-16 x 2.25 (002,004,302)
15	06209400	1	Bolt-Round Head Square Neck .25-20 x 1.25 (002,004,302)
16	03215500	1	Friction Plate (002,004,302)
17	03804600	1	Housing-Inner-Chute Defl Control (002,004,302)
18	03804700	1	Housing-Outer-Chute Defl Control (002,004,302)
19	01123800	2	Friction Washer (002,004,302)
20	08320900	1	Spring-Compression .187 x .56 x 1.62 (002,004,302)
21	06409600	1	Washer-Flat-Steel .458 x .750 x .06 (002,004,302)
22	06512200	1	Nut-Locking Top .375-16 (002,004,302)
23	06929000	1	Control-Choke (001,003,006,008,301,301*)
	06937300	1	Control-Choke 5 HP (002,004,007,009,303)
24	01157100	1	Recoil Start Handle
25	03802900	1	Bracket-Starter-Handle
26	06206000	1	Bolt-Round Head Square Neck .25-20 x 1.50
27	07514500	1	Knob (002,004,007,009,302)
28	53800100	1	Crank-Chute (002,004,007,009,302)
	03802800	1	Support-Chute Crank (002,004,007,009,302)
	05800200	2	Pin-Roll .125 x 1.38 (002,004,007,009,302)
	06406200	2	Washer-Flat-Steel .754 x 1.125 x .062 (002,004,007,009,302)
	08330600	2	Spring-Compression (002,004,007,009,302)
	03805300	2	Sleeve-Spring Thrust (002,004,007,009,302)
	03805400	2	Washer-Friction .53 x 1.00 x .094 (002,004,007,009,302)
29	03803900	1	Spacer-Crank Transfer Pinion (002,004,007,009,302)
30	06701100	1	Pin-Cotter .15 x 1.25 (002,004,007,009,302)
31	03804300	1	Pinion-Crank Transfer 48T (002,004,007,009,302)
32	03804200	1	Gear-Crank Transfer 12T (002,004,007,009,302)
33	03803600	1	Shaft-Chute Crank Transfer (002,004,007,009,302)
34	06701000	1	Pin-Hair Internal .08 x .38 x 1.42 (002,004,007,009,302)
35	06406800	2	Washer-Flat-Steel .194 x .492 x .047
36	06504200	2	Nut-Locking .312-18
37	07524500	2	Knob
38	06409000	4	Washer-Flat-Steel .328 x .875 x .062
39	06303600	2	Washer-Lock .313 x .078
40	03802100	1	Handle Bar-Lower
41	03802700	2	J Bolt .31-18
42	02460700	1	Key-w/Cap

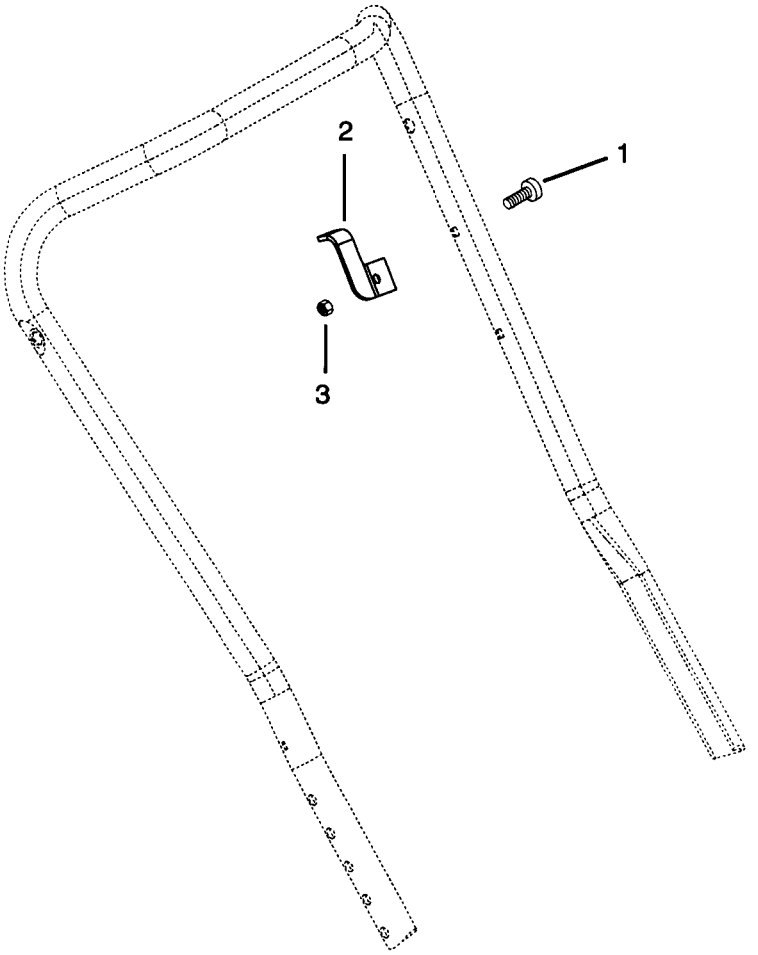
HANDLEBARS, CONTROLS, AND SHROUDS (CONTINUED)

Models 938001,002,003,004,006,007,008,009,301,301*,302,303

Item No.	Part No.	Qty.	Description
43	07517700	1	Cap-Ignition Switch
44	06517300	1	Nut-Panel .625-32
45	07527800	1	Plug-Hole .50 Diameter (001,003,006,008,301,301*,303)
46	02456500	1	Key Switch Assembly
47	06216900	4	Bolt-Round Head Square Neck .25-20 x 1.75
48	03803800	1	Guide-Rope
49	06111200	2	Screw-Machine 10-24 x .750
50	07518200	1	Primer Assembly
51	06930500	1	Cable-Clutch Control (001,002,003,004,301,302)
	06937100	1	Cable-Clutch Control (006,007,008,009,301*,303)
52	07412300	2	Screw-Spec-Tapping #10 x 1.0 w/#12 Head
53	03805200	1	Sheet-Heat Reflective 3 x 5 (001,003,006,008,301,301*)
	03805000	1	Sheet-Heat Reflective (002,004,007,009,302,303)
54	53801000	1	Cowl-Replacement (001,002,003,004,301,302)
	53801100	1	Cowl-Assembly (006,007,008,009,301*,303)
55	06930400	1	Cable-Chute Deflector Control (002,004,302)
56	07517300	2	Cable Tie (001,003,006,008,301,301*)
	07517300	3	Cable Tie (002,004,007,009,302,303)
	07527400	1	Cable Tie (004,009)
57	03804500	1	Bracket-Angle, Deflector Control (002,004,302)
58	06506500	2	Nut-Locking 10-24
59	06113000	4	Machine Screw 10-24 x .50 (001,002,003,004,301,302)
	07413300	8	Screw-Tapping 12-24 x .50 (006,007,008,009,301*,303)
60	06400100	4	Washer-Flat-Steel .25 x .562 x .049 (001,002,003,004,301,302)
	03806700	2	Plate-Cowl Retainer (006,007,008,009,301*,303)
61	06506500	4	Nut-Locking 10-24 (001,002,003,004,301,302)
62	07403300	1	Screw-Tapping 10-16 x .75 (002,004,302)
63	06909100	1	Cable Clamp Non Skid (002,004,302)
64	07517000	1	Cap (006,007,008,009,301*,303)

ANCHOR CABLE HARDWARE

Models 938001,003,006,007,008,009,301,301*,303



Item No.	Part No.	Qty.	Description
1	06209400	2	Bolt-Round Head Square Neck .25-20 x 1.25
2	01137500	1	Cable-Anchor
3	06527600	7	Nut-Locking-Center-Flange .250-20

655 West Ryan Street • P.O. Box 157 • Brillion, WI 54110-0157 • 920-756-2141 • Fax 920-756-4421

Ask Your Dealer For Information On These Other Fine Ariens Products

- **Front and Rear Tine Tillers**
- **Walk-Behind Lawn Mowers**
- **Zero-Turning Radius Mowers**
- **Rear Engine Riding Mowers**
- **Yard and Garden Tractors**
- **Commercial Walk-Behind and Riding Mowers**
- **Sno-Thros**